

# Water Conditions Summary

## South Florida Water Management District Governing Board Meeting

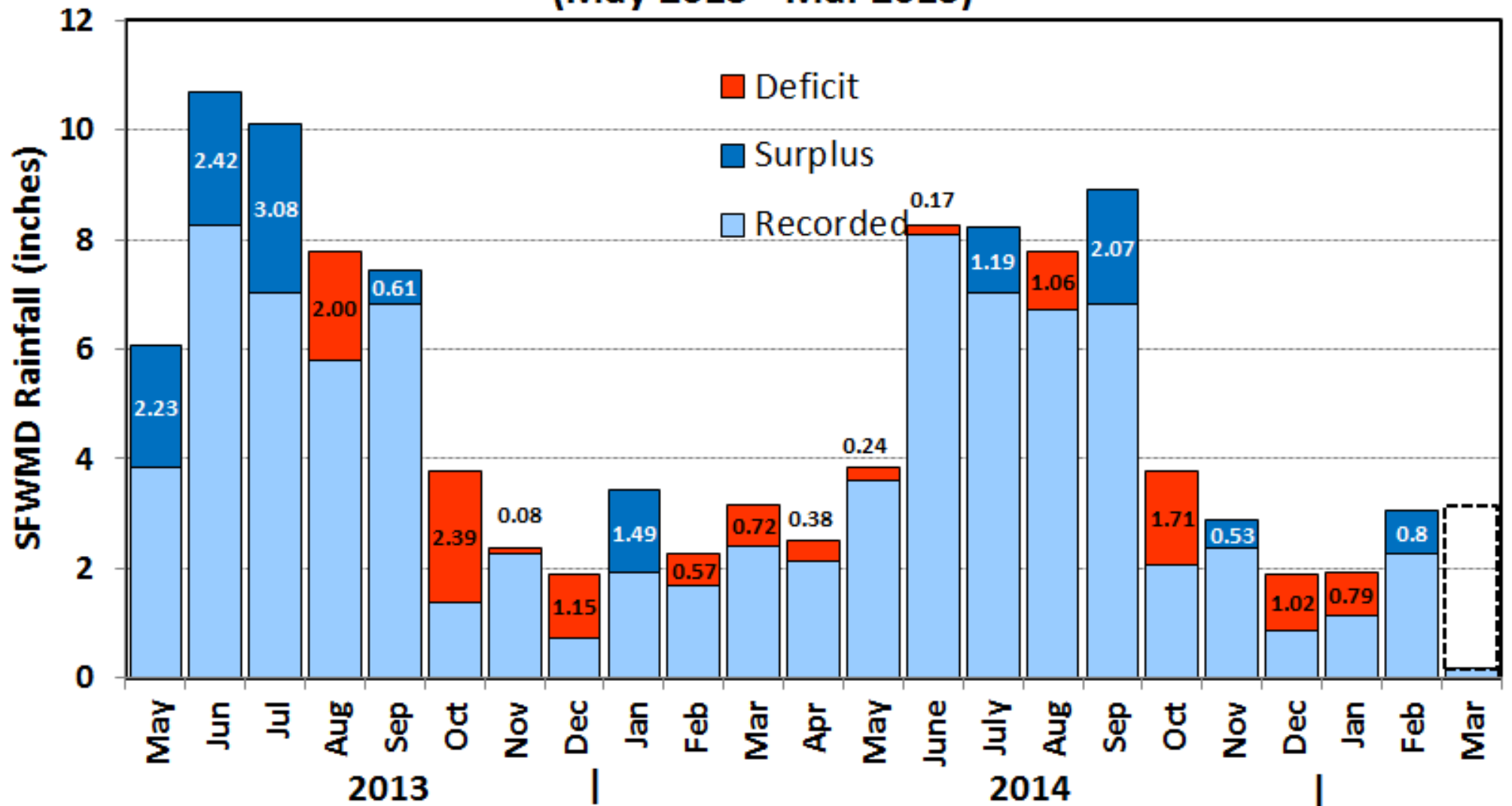
**March 12, 2015**

Jeff Kivett, PE, Division Director  
Operations, Engineering & Construction  
South Florida Water Management District



# SFWMD Rainfall Distribution Comparison

## (May 2013 - Mar 2015)



### 2013 WET SEASON:

- May 18<sup>th</sup> Start
- Oct 8<sup>th</sup> End
- Slightly above average

### 2013-14 DRY SEASON:

- January above average
- Dry Season ended 92% of average

### 2014 WET SEASON:

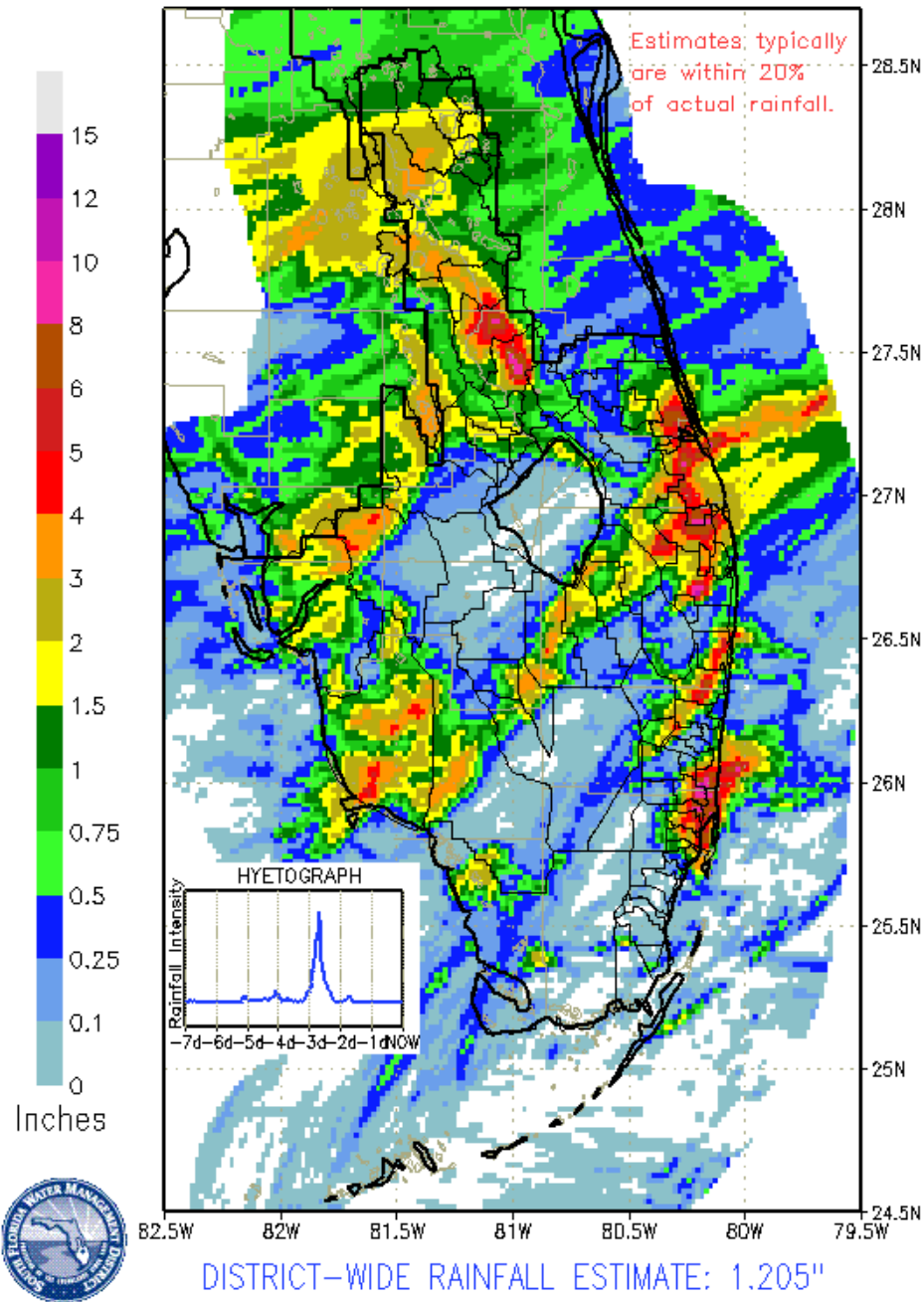
- May 26<sup>th</sup> – Oct 4<sup>th</sup>
- Near average
- Timing near average

### 2014-15 DRY SEASON:

- As of March 9<sup>th</sup> at 88% of normal

# SFWMD PROVISIONAL RAINFALL 7-DAY RAINFALL ESTIMATES

FROM: 0915 EST, 02/24/2015 THROUGH: 0915 EST, 03/03/2015



## SFWMD Rainfall February 28, 2015

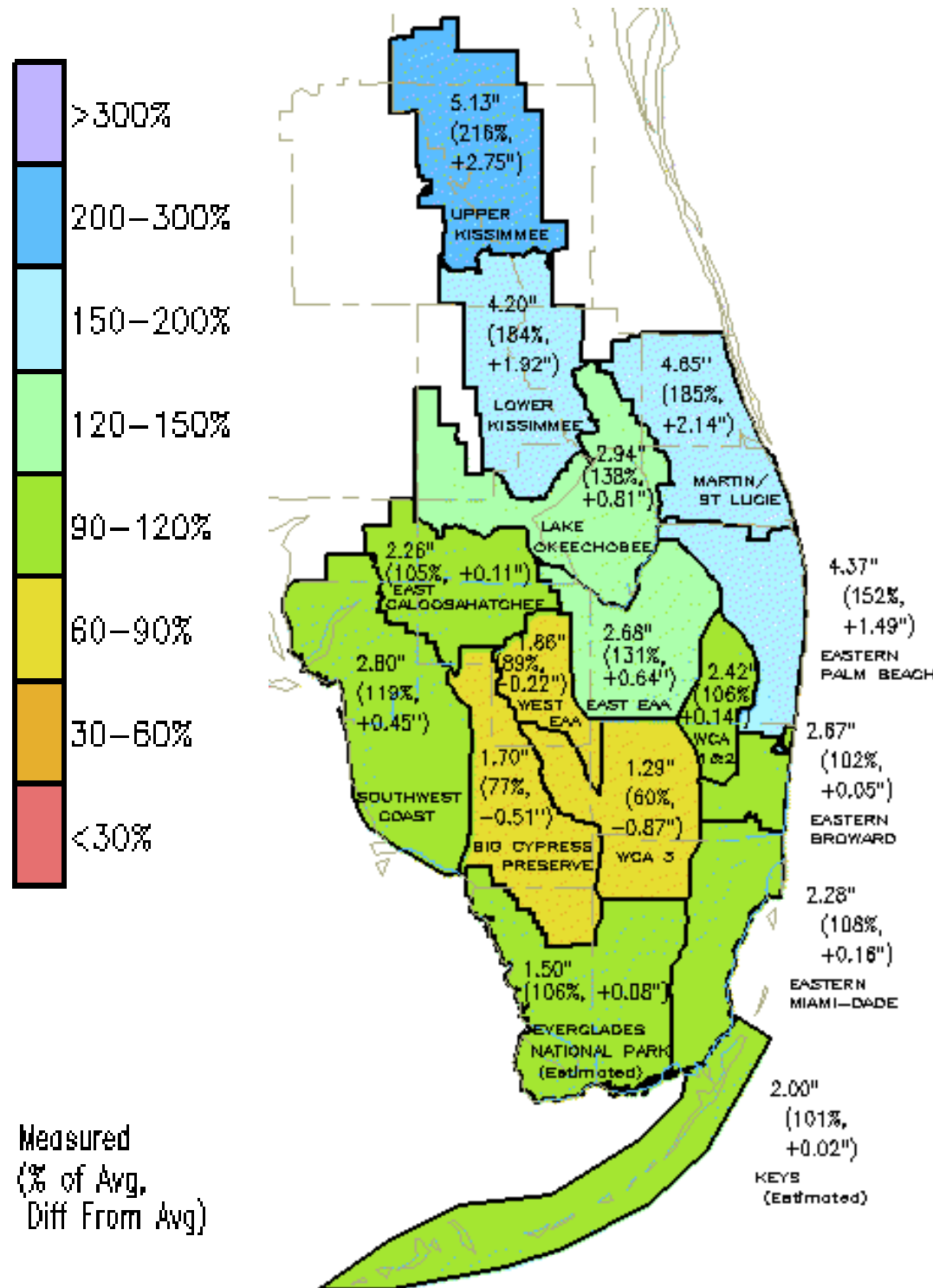
### DISTRICT-WIDE: 1.2"

- Most of the rain fell in less than 3-hour periods on Feb 28th
- Local maximums
- 10 inches Broward
- 8+ inches Lower Kissimmee, Martin/St. Lucie/N PB County
- Normal February rainfall is about 2.2 inches for the entire month.

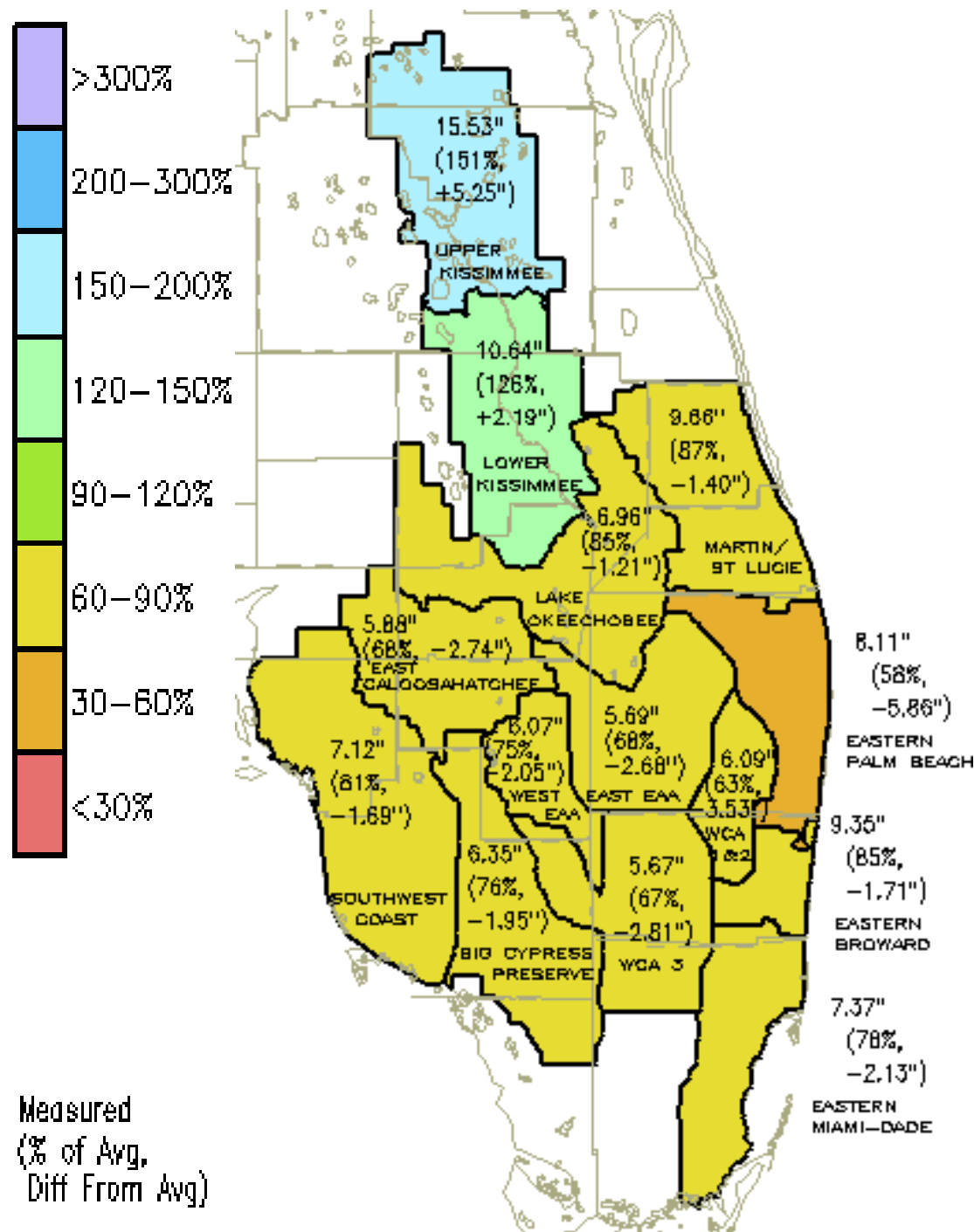
# SFWMD Feb. 2015 Rainfall

(02-Feb to 01-Mar)

**DISTRICT-WIDE: 3.07"**  
(135% of Avg, or +0.80")



- Rainfall on 02/28/2015 switched February totals from below to above average
- Upper and Lower Kissimmee basins are 216% and 184% of average
- Most basin are at or above average for the month



## SFWMD

### Dry Season Rainfall

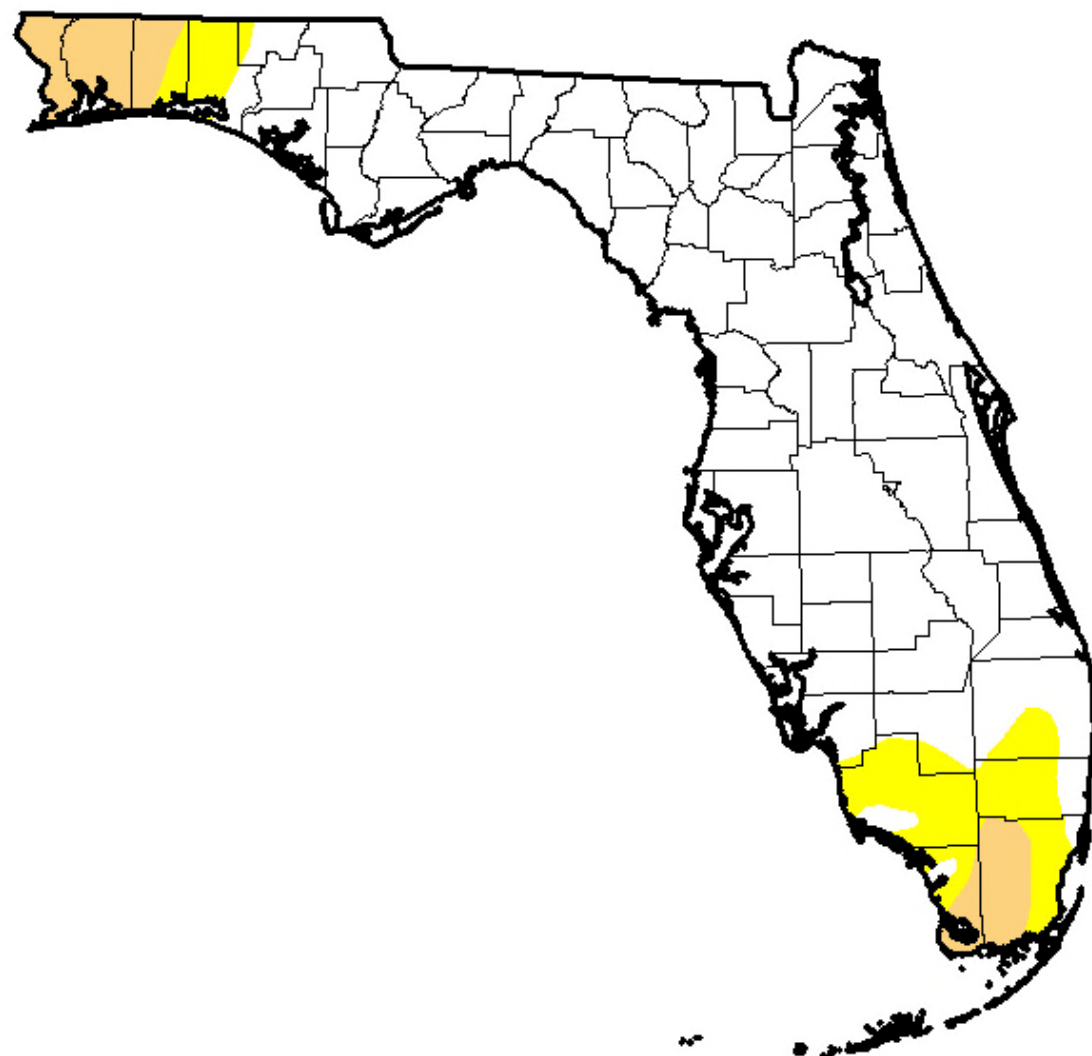
(02-Nov to 09-Mar-2015)

**DISTRICT-WIDE: 8.14"**  
(88% of Avg, or -1.12")

- Upper and Lower Kissimmee 26% - 51% **above** average dry season rainfall
- All other District basins 25% - 40% **below** average dry season rainfall
- Largest deficit in Eastern Palm Beach County area

# U.S. Drought Monitor Florida

**March 3, 2015**  
(Released Thursday, Mar. 5, 2015)  
Valid 7 a.m. EST



*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	82.88	17.12	6.84	0.00	0.00	0.00
<b>Last Week</b> <i>2/24/2015</i>	78.34	21.66	6.80	0.00	0.00	0.00
<b>3 Months Ago</b> <i>12/2/2014</i>	89.61	10.39	2.28	0.06	0.00	0.00
<b>Start of Calendar Year</b> <i>12/31/2014</i>	94.33	5.67	0.99	0.00	0.00	0.00
<b>Start of Water Year</b> <i>9/30/2014</i>	77.22	22.78	6.61	0.00	0.00	0.00
<b>One Year Ago</b> <i>3/4/2014</i>	100.00	0.00	0.00	0.00	0.00	0.00

## Intensity:

D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought
D2 Severe Drought	

*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.*

**Author:**  
David Simeral  
Western Regional Climate Center

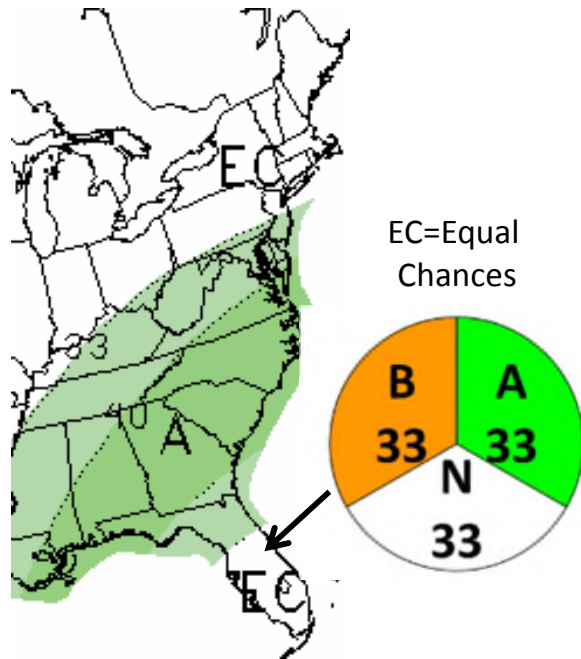


<http://droughtmonitor.unl.edu/>

# U. S. Seasonal Precipitation Outlook

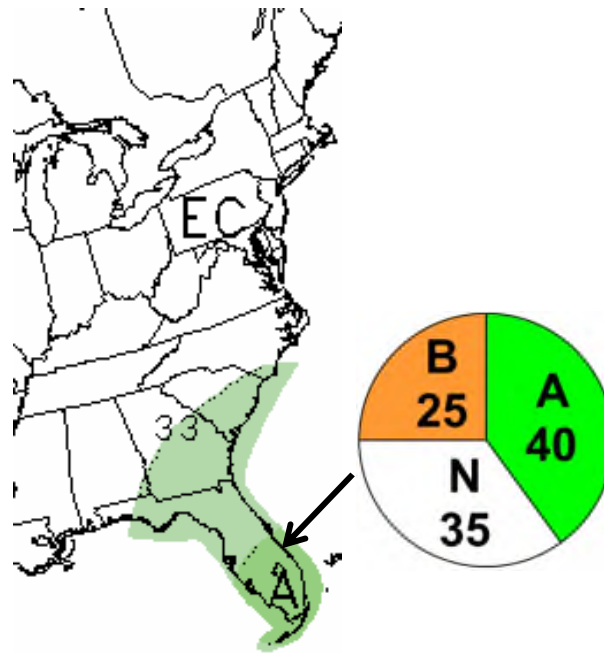
National Climate Prediction Center (CPC)

**Mar 2014**



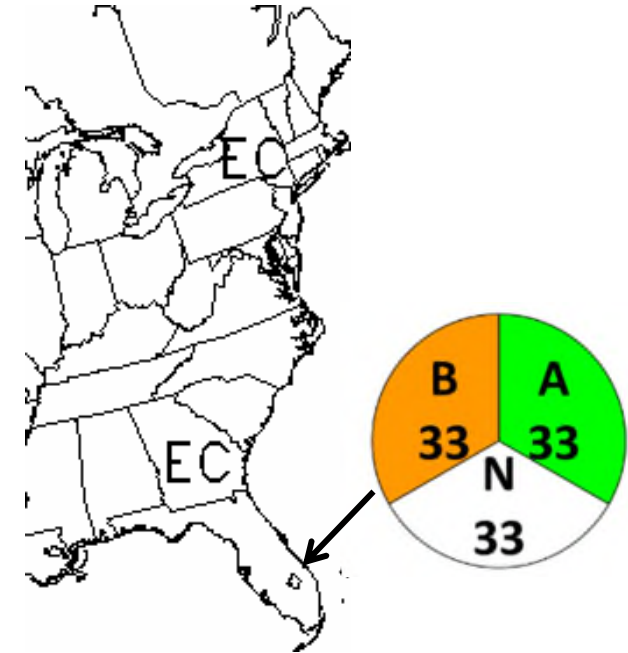
*Posted 28-Feb-2015*

**Mar-May 2015**



*Posted 19-Feb-2015*

**Apr-Jun 2015**



*Posted 19-Feb-2015*

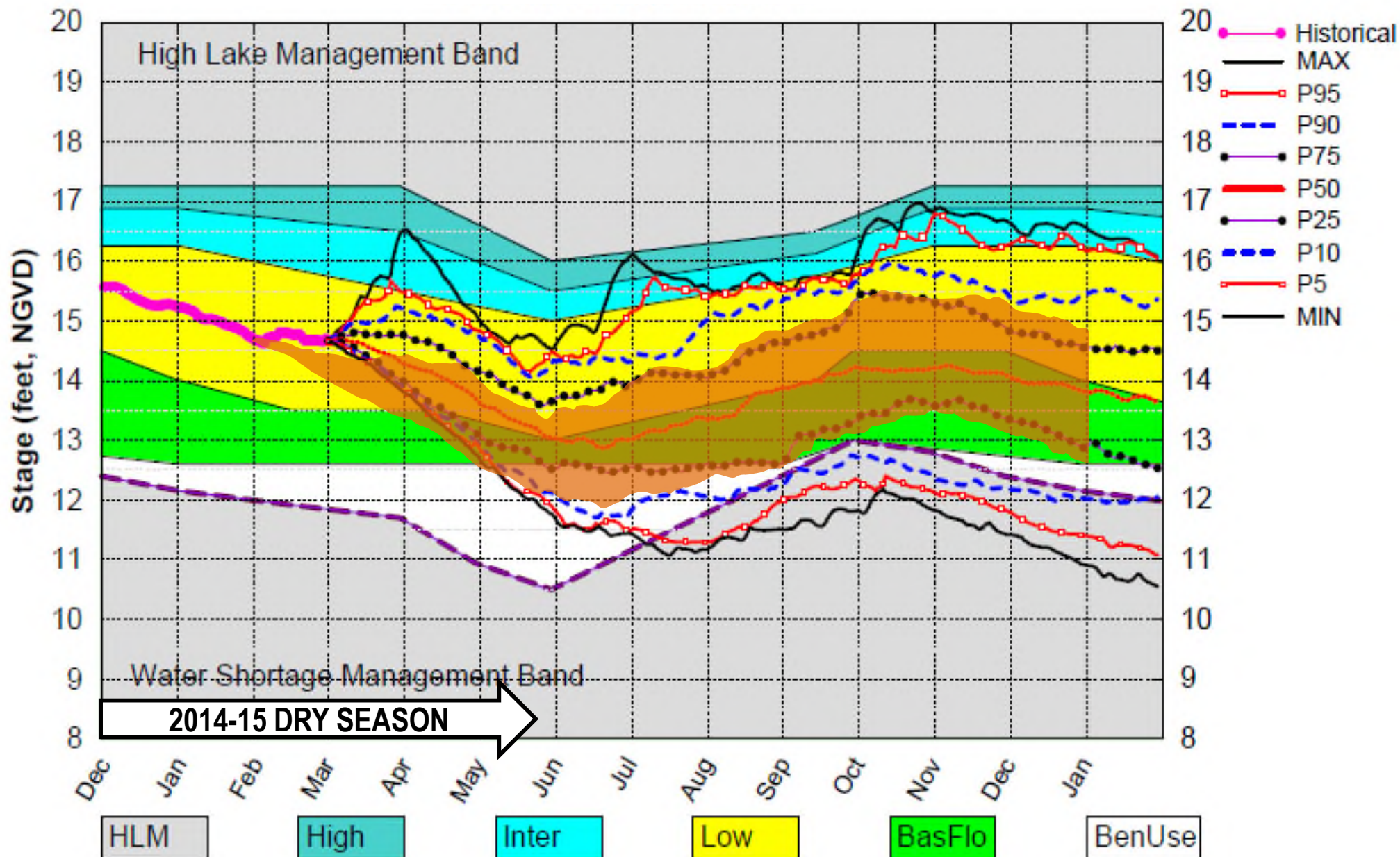
**The most-recent CPC precipitation outlooks for central & southern Florida indicate:**

- Equal chances of Above-Normal (A), Normal (N) & Below-Normal (B) rainfall for March
- Increased chances of Above-Normal (A) rainfall for March-May
- Equal chances of Above-Normal (A), Normal (N) & Below-Normal (B) rainfall for all 3-month windows starting with April and ending with December



# Lake Okeechobee SFWMM March 2015 Position Analysis

Percentiles based on 41 possible outcomes starting with March 1<sup>st</sup> initialization

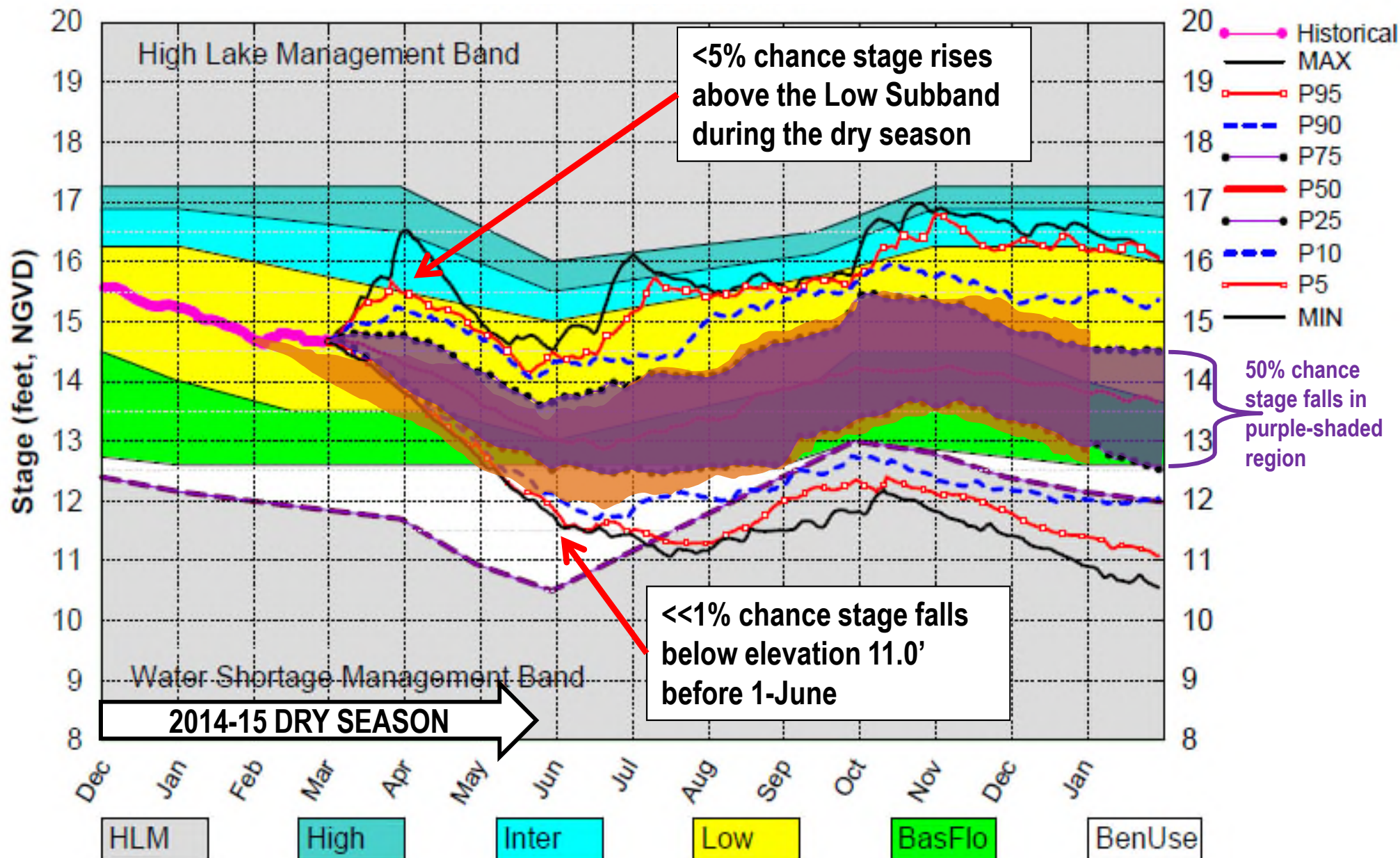


(See assumptions on the Position Analysis Results website)



# Lake Okeechobee SFWMM March 2015 Position Analysis

Percentiles based on 41 possible outcomes starting with March 1<sup>st</sup> initialization



(See assumptions on the Position Analysis Results website)



# 2015 Operations

Lake Okeechobee

C10A

S352

S354

S351

EAA

G200A

G404

WCA-1

WCA-2A

WCA-2B

WCA-3A

WCA-3B

Everglades NP

Lake Okeechobee regulatory releases to tide through L-8 and C-51 canals

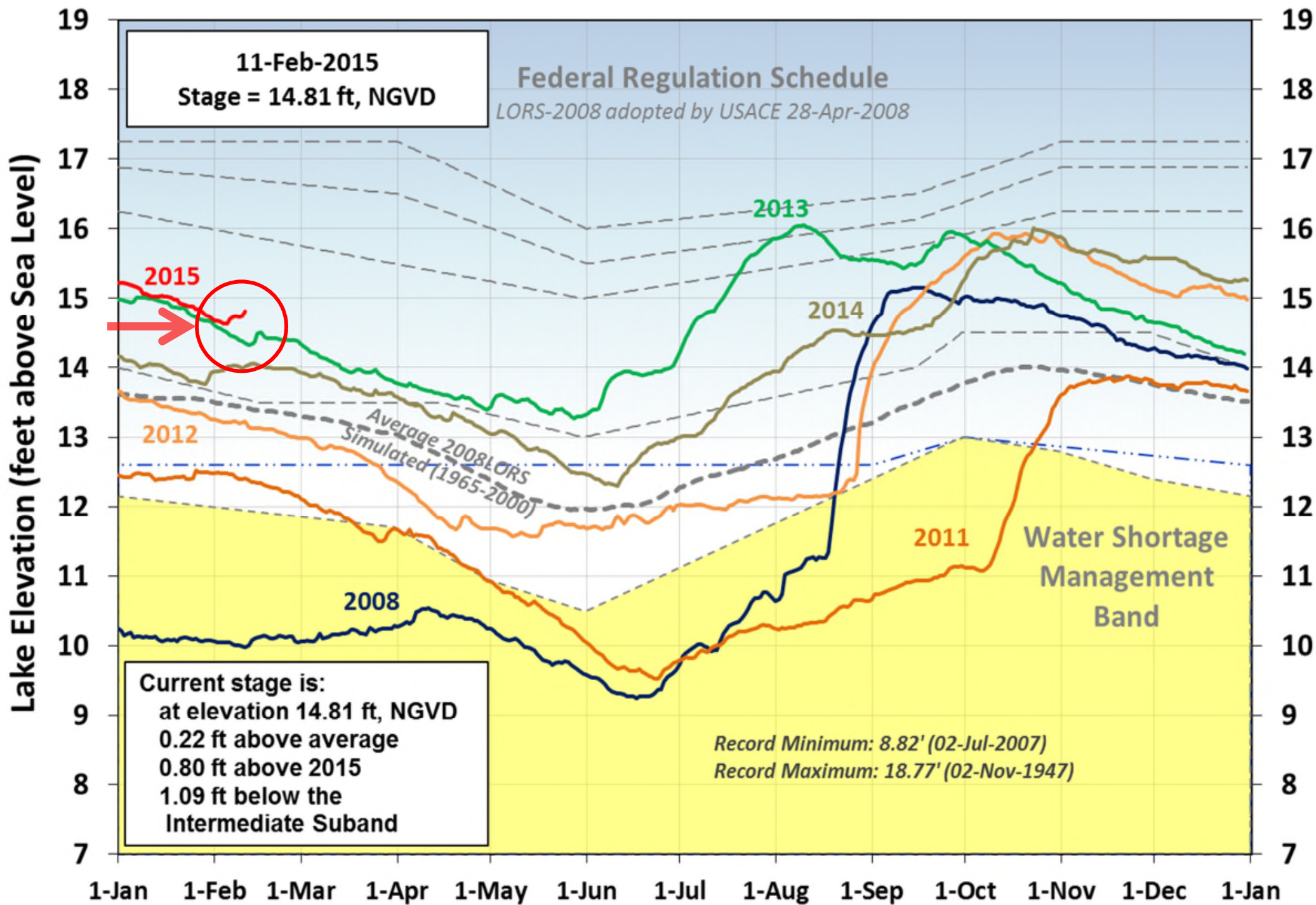
L. Okeechobee – maximum practical regulatory releases to WCA 1, 2A, 3A NW Corner (G-404), Holey Land, and Rotenberger through STA1E, STA1W, STA2, and STA3/4 - May 1, 2014 through March 02, 2015, approximately 496,500 acre-feet\*

WCA-1, 2A, and 3A releases for water supply

WCA-3A Discharges to ENP following the SRS Rainfall Plan

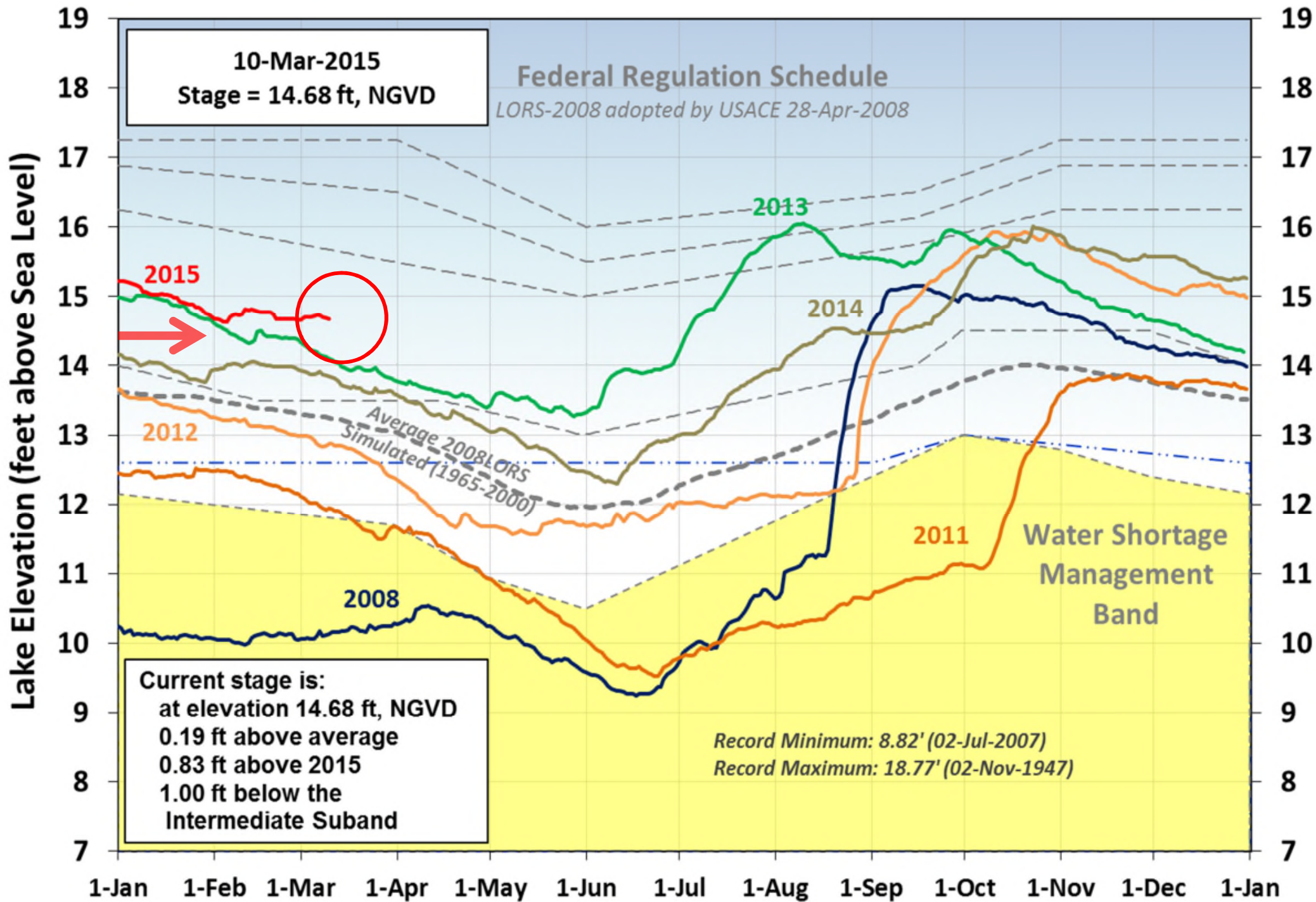


# Lake Okeechobee Water Level Comparison



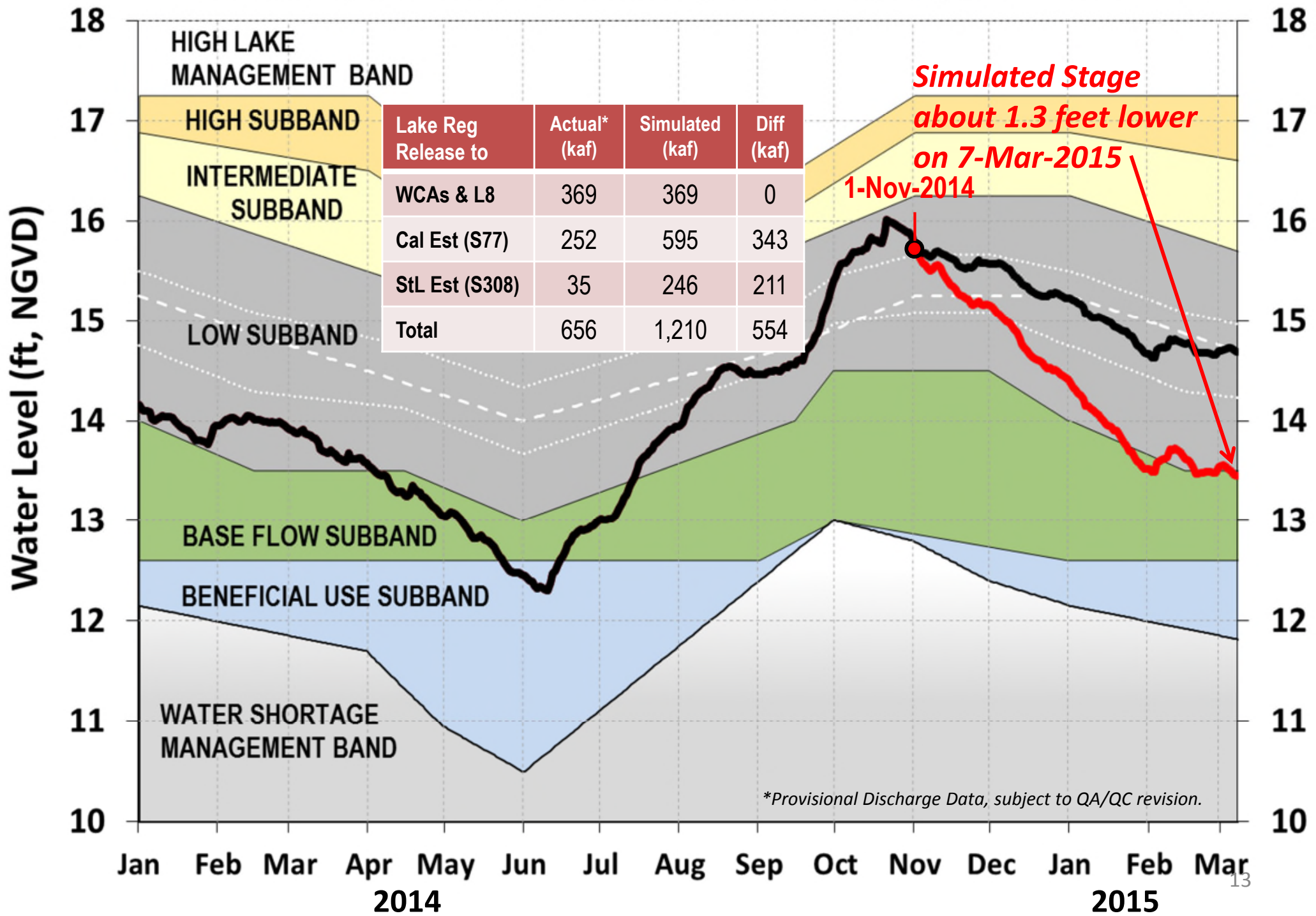


# Lake Okeechobee Water Level Comparison



# 2014-2015 Lake Okeechobee Historical & Simulated Water Levels

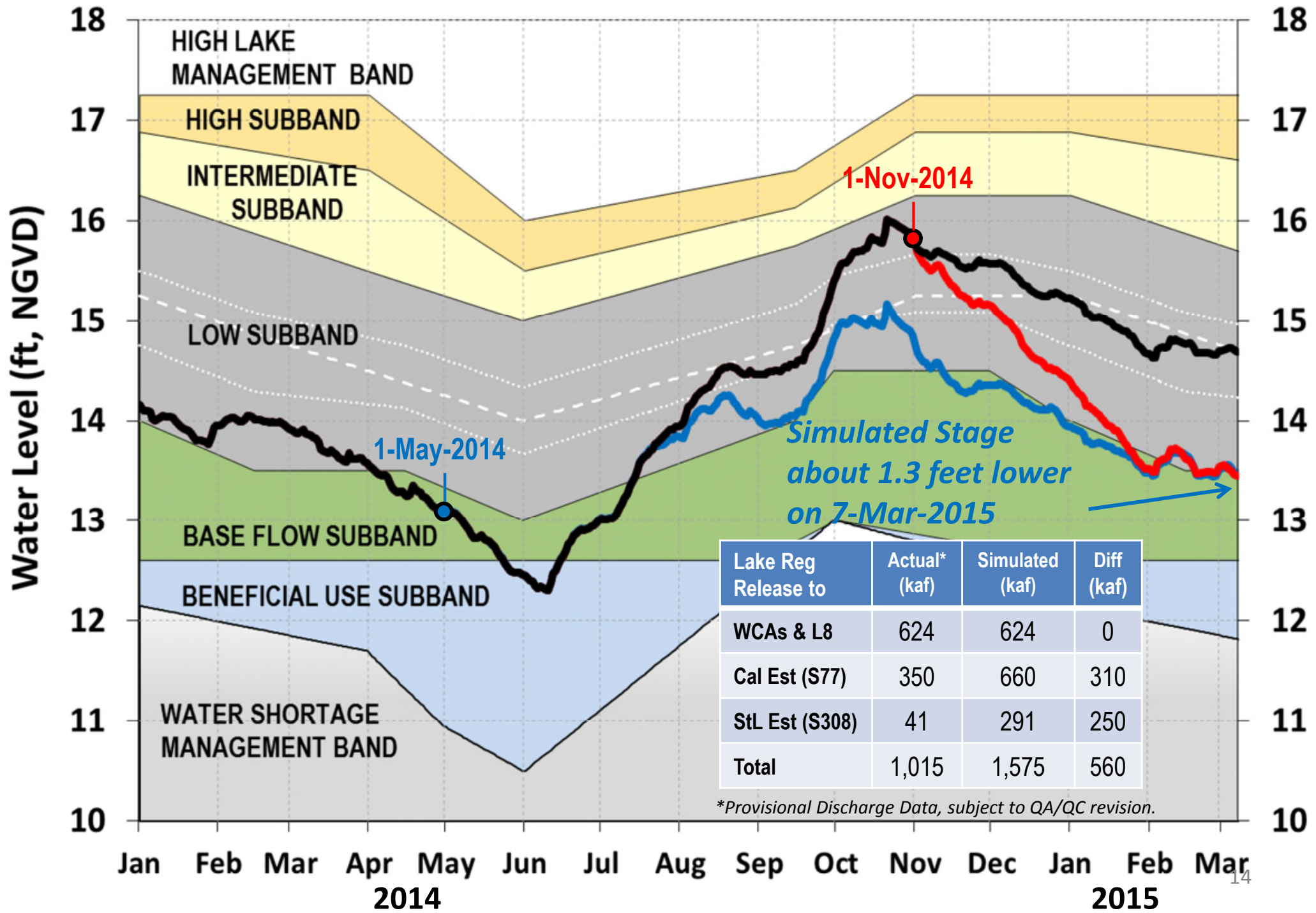
Simulated 'up-to' releases per LORS release guidance starting 1-May-2014 & 1-Nov-2014





# 2014-2015 Lake Okeechobee Historical & Simulated Water Levels

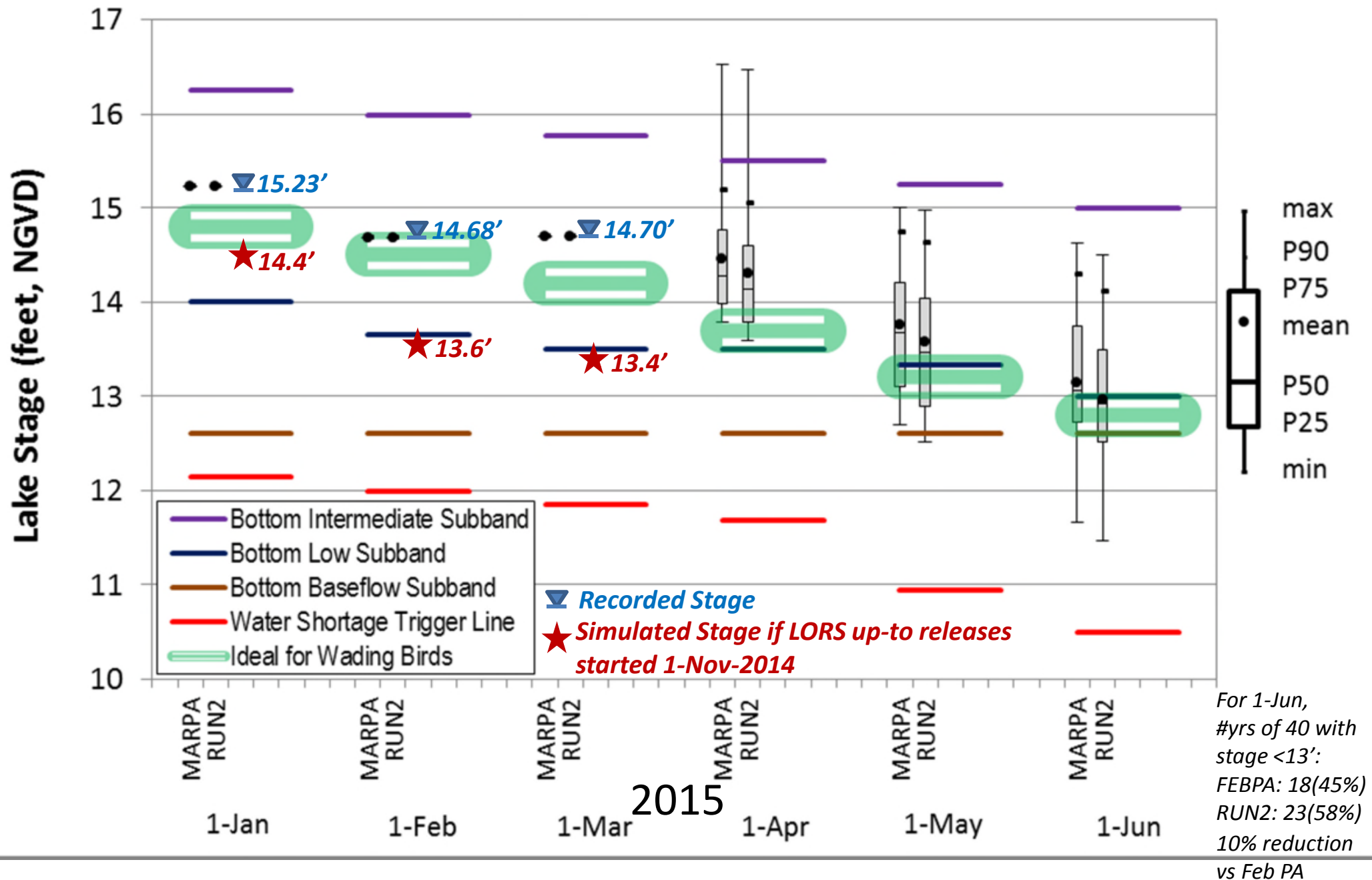
Simulated 'up-to' releases per LORS release guidance starting 1-May-2014 & 1-Nov-2014





# Distribution of Simulated Lake O Stages

for all 40 Dry Seasons (Jan-May)



# Questions?

